REMARKS

Status of the claims:

With the above amendments, claims 1-4 and 6-21 have been amended, claims 5, 33-35, 38, and 40-62 have been previously canceled, and claims 1-4, 6-32, 36, 37, 39, and 63-81 are pending and ready for further action on the merits. No new matter has been added by way of the above amendments. Claim 1 has been amended so that L_1 is -O-, -O-alkylene-, or -alkylene-O-. Reconsideration is respectfully requested in light of the following remarks.

Advisory Action

Applicants respectfully answer that should the Examiner issue another Advisory Action that the claim amendments as recited above be entered so as to put the application in better condition for appeal.

Examiner Interview

Applicants' representative thanks the Examiner for taking the time to Interview with Applicants' representative on December 4, 2007. Applicants' representative and the Examiner discussed the rejections of record. In the interview, Applicants' representative asserted that the claims as they currently stood should have obviated the rejections of record. The Examiner disagreed. Without acquiescing to the Examiner's position, Applicants have amended the claims in the present response to expedite prosecution but reserve the right to file continuation applications for non-claimed subject matter.

Rejections under 35 U.S.C. §112, first paragraph

Claim 30 is rejected under 35 U.S.C. §112, first paragraph as allegedly not being enabled.

Applicants traverse.

The Examiner asserts that claim 30 lacks enablement for the following terms: biologic response modifiers, glucocorticoids, DPP-IV inhibitors, GK activators, insulin mimetics, insulin secretagogues, insulin sensitizers, GLP-1 mimetics and fibrates.

Applicants remind the Examiner that "[a] patent need not teach, and preferably omits, what is well known in the art." In re Buchner, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991); Hybritech, Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987); and Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co., 730 F.2d 1452, 1463, 221 USPQ 481, 489 (Fed. Cir. 1984).

Applicants submit that each of biologic response modifiers, glucocorticoids, DPP-IV inhibitors, GK activators, insulin mimetics, insulin secretagogues, insulin sensitizers, GLP-1 mimetics and fibrates were well known in the art at the time of the filing the present invention and therefore, the present invention need not teach again those compounds that are well known in the art. For the Examiner's benefit, Applicants point out various examples of these enumerated classes of compounds that were known prior to the filing of the present invention.

Biologic response mediators are substances that trigger the body's response to an infection. These substances include for example, interferons, interleukins, and tumor necrosis factors.

Glucocorticoids include hydrocortisone (cortisol), cortisone acetate, prednisone, prednisolone, methylprednisolone, dexamethasone, betametasone, triamcinolone, beclometasone, fludocortisone acetate, deoxycorticostoerone acetate, and aldosterone.

Dipeptidyl peptidase-IV (DPP-IV) is a serine protease belonging to the group of post-proline/alanine which cleaves amino-dipeptidases, specifically removing the two N-terminal amino acids from proteins having proline or alanine in position 2. DPP-IV inhibitors were well known in the art at the time of filing the present invention. For example, the compounds in WO 98/19998, WO 00/34241, U.S. Pat. Nos. 6,124,305, 6,380,398, and WO 99/38501 were all known to be DPP-IV inhibitors at the time of filing the present invention.

Glucokinase (GK) is one of group of hexokinases found in mammals The hexokinases catalyze the first step in the metabolism of glucose, that is, the conversion of glucose to glucose-6-phosphate. Thus, GK activators are compounds that will increase the flux of glucose metabolism in β-cells and hepatocytes, which will be coupled to increased insulin secretion. Accordingly, these activators are useful for treating type II

diabetes. GK activators were well known in the art at the time of filing the present invention. These GK activators include the compounds as disclosed in US Patent Nos. 6,388,088, 6,489,485, 6,486,184, 6,482,951 6,448,399, 6,441,184, 6,441,180, 6,433,188, 6,388,088, 6,388,071, 6,384,220, 6,369,232, 6,353,111, and 6,320,050.

Insulin mimetics include, for example, the compounds that can be found in US Patent No. 6,376,529.

Insulin secretagogues include compounds such as glimepride, linogliride, A-4166, forskolin, dibutryl cAMP, and isobutylmethylxanthine (IBMX), all of which were well known in the art at the time of filing the present invention.

Insulin sensitizers include (i) PPARγ agonists and (ii) biguanides. The PPARγ agonists include glitazones (for example, troglitazone, pioglitazone, englitazone, MCC-555, BRL49653 (rosiglitazone), and for example also include compounds such as those disclosed in WO 97/27857, 97/28115, 97/28137 and 97/27847. The biguanides include such compounds as metformin and phenformin.

Glucagon-like peptide-1 (GLP-1) is a gastrointestinal hormone that is released postprandially from the L-cells of the gut. The GLP-1 mimetics are compounds that mimic the effect of GLP-1. They include compounds such as those found in WO00/42026 and WO00/59887, which were well known prior to filing the present invention.

Fibrates denote a family of compounds which have hypocholesterolemic and hypolipidemic properties.

Thus, Applicants submit because these compounds were well known in the art prior to filing the instant invention, the claims of the present invention including the full scope of claim 30 can be made and used without undue experimentation. Withdrawal of the rejection is warranted and respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 1-3, 5-32, 36, 37, 39, and 63-81 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Thurieau '140 (WO 2002/10140) and Thurieau '401 (WO 99/64401).

Applicants traverse.

Applicants have amended claim 1 so that L_1 is -O-, -O-alkylene-, or -alkylene-O-. With this amendment, Applicants assert that there is no overlap between the instantly claimed genus and the genera disclosed in Thurieau '140 and/or Thurieau '401. In other words, neither Thurieau '140 nor Thurieau '401 disclose or suggest the compounds as are presently claimed in the instant invention.

For example, Applicants note that the R_3 in Thurieau '140 and/or Thurieau '401 corresponds to the $-(CH_2)_a-Ar_2-L_1-T$ group in the present invention. R_3 is $-(CH_2)_m-E-(CH_2)_m-Z^2$ in Thurieau '140 and/or Thurieau '401. When a is zero in the present invention, m in Thurieau '140 and/or Thurieau '401 must be zero and E must be a bond. Z_2 in Thurieau '140 and/or Thurieau '401 can be an optionally substituted phenyl or naphthyl group. However, Thurieau '140 and/or Thurieau '401 never say what those optionally substituted substituents can be. Applicants have limited the present invention so that L_1 is -O-, -O-alkylene-, or -alkylene-O-. Applicants submit that the limitless number of possible substituents off of the phenyl or naphthyl rings can not render obvious the limited number of substituents claimed in the present invention (i.e., L_1 in the present invention). See *In re Baird*, 16 F.3d 380, 29 USPQ2d 1550 (Fed. Cir. 1994). In *Baird*, the court found that a very large but finite number of possible choices of substituents in a genus could not render *prima facie* obvious species in that genus. Similarly, Applicants submit that an infinite number of possible substituents can not render *prima facie* obvious a limited number of species within that genus (as occurs in the present claims).

Moreover, Thurieau '140 and/or Thurieau '401 fail to render obvious the present invention (i.e., because of limited overlap with the presently claimed invention) because one would have to select each m in Thurieau '140 and/or Thurieau '401 to be zero, or alternatively, one m would have to be zero and one m would have to be one. Because there are seven possibilities for each m, selecting each m to be zero corresponds to a one in forty-nine probability. There is a 2 in 49 probability of selecting one m to be zero and the other m to be one. Thus, there is a 3 in 49 probability of selecting the m's in Thurieau '140 and/or Thurieau '401 to have overlap with the "a" in the presently claimed invention. Likewise, in Thurieau '140 and/or Thurieau '401 one would have to select E to be a bond out of six possibilities (a one in six probability). Further, one would have to

select Z^2 to be phenyl or naphthyl out of thirteen possibilities (a two in thirteen probability). This means that even without accounting for the limitless possible number of substituents on the phenyl or naphthyl group that is Z^2 in Thurieau '140 and/or Thurieau '401, there is a six in 3822 (2/13 X 1/6 X 3/49) probability of selecting the exact substituents needed to arrive at overlap with the corresponding substituents – $(CH_2)_a$-Ar_2 in the presently claimed invention.

It should be noted that other substituents would also have to be selectively picked and chosen in Thurieau '140 and/or Thurieau '401 to arrive at overlap with the present invention. Among the picking and choosing of substituents that would have to be selected in Thurieau '140 and/or Thurieau '401 to arrive at overlap with the instantly claimed invention are the various substituents that are R^1, R^5, R^4, and A^1 in Thurieau '140 and/or Thurieau '401.

Because of the extensive picking and choosing from the various substituents in Thurieau '140 and/or Thurieau '401 that would be required to have any overlap with the presently claimed invention, Applicants submit that Thurieau '140 and/or Thurieau '401 can not render *prima facie* obvious the present invention. Withdrawal of the rejection is warranted and respectfully requested.

CONCLUSION

With the above amendments and remarks, Applicants believe that all objections and/or rejections have been obviated. Thus, each of the claims remaining in the application is in condition for immediate allowance. A passage of the instant invention to allowance is earnestly solicited.

Applicants respectfully petition for a second and third month extension of time in the amount of $465. Applicants believe that no fee beyond the extension fee and the requisite RCE fee is necessary, however, should an additional fees be deemed to be necessary, the Commissioner is hereby authorized to charge any fees required by this action or any future action to Deposit Account No. 16-1435.

Should the Examiner have any questions relating to the instant application, the Examiner is invited to telephone the undersigned at (336) 607-7486 to discuss any issues.

Respectfully submitted,

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